Date: Wed, 23 Jun 93 11:30:44 PDT

From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>

Errors-To: Info-Hams-Errors@UCSD.Edu

Reply-To: Info-Hams@UCSD.Edu

Precedence: Bulk

Subject: Info-Hams Digest V93 #770

To: Info-Hams

Info-Hams Digest Wed, 23 Jun 93 Volume 93 : Issue 770

Today's Topics:

5AORR Operating Practices
6m work
Azimuthal Projection Programs?
Ground Rods In Concrete
Mac Morse Software (2 msgs)
UN: The ITU phonetic alpha
USED HF RIG PRICE SURVEY

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu> Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu> Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: Wed, 23 Jun 1993 15:03:42 GMT

From: mentor.cc.purdue.edu!noose.ecn.purdue.edu!bluegrass.ecn.purdue.edu!

wb9tow@purdue.edu

Subject: 5AORR Operating Practices

To: info-hams@ucsd.edu

Yes Alan, I feel you are right referring to Romeo's operating practices, But first, several prominent Dxers discussed this matter with him at Dayton, he acknowledged them with "yes, yes"...but I think it is only fair to give the guy the benifit of the doubt. He has limited understanding of English. Often in communication, an individual will state "yes" and not be in total understanding of the topic at hand. I am sure that several, Ed NT2X, Ed W2MIG, Joe K8JP and other noted present day known Dxers will provide the necessary feedback to Romeo and he will

get better...afterall, OH2BH has been dxing for many years, you cant expect Romeo to display the abilities of one with 30+ years of Dxpeding??? Reguardless, I DO agree with you...he will learn.let's hope that it is soon! Another note...the person in the country you need is in control.. if you want the dx..you must do what he says to do..oh well.. vri 73 es gud dx...steve

Date: 23 Jun 1993 11:02 EDT

From: usc!cs.utexas.edu!uwm.edu!linac!uchinews!cs.umd.edu!skates.gsfc.nasa.gov!

nssdca.gsfc.nasa.gov!stocker@network.UCSD.EDU

Subject: 6m work

To: info-hams@ucsd.edu

Have to confess that the recent discussions on 6m use, opportunities and problems have really peaked my interest in this band. The FAQ was very useful and informative.

However, I would like some personal insights in the opportunties and frustrations in taking advantage of the "hf-likeness" of this VHF band. Also, any advice on the best way to get equipment to try out the band without plunking down a bunch of money. Lastly, any info that people would care to pass on personal experience with antennas for the band especially good luck with homebrew or less expensive antennas.

Thanks for any information you might be able to send me.

Date: Wed, 23 Jun 93 17:56:22 GMT

From: dog.ee.lbl.gov!overload.lbl.gov!agate!headwall.Stanford.EDU!

nntp.Stanford.EDU!umunhum!paulf@network.UCSD.EDU

Subject: Azimuthal Projection Programs?

To: info-hams@ucsd.edu

Surely, someone out there has written some code to make azimuthal maps from the various world databases. Problem is, I can't find them -- and archie gags if I just ask for "maps". Anybody know where I can find a map generator?

- -

⁻⁼Paul Flaherty, N9FZX | "The National Anthem has become The Whine."

^{-&}gt;paulf@Stanford.EDU | -- Charles Sykes, _A Nation of Victims_

Date: Wed, 23 Jun 1993 15:14:14 GMT

From: pravda.sdsc.edu!news.cerf.net!usc!howland.reston.ans.net!gatech!wa4mei!

ke4zv!gary@network.UCSD.EDU Subject: Ground Rods In Concrete

To: info-hams@ucsd.edu

In article <57684.match@sky.civil.utah.edu> <match@sky.civil.utah.edu> writes: >>In article <C8zqDH.3In@news.claremont.edu> aross@jarthur.claremont.edu (Andrew M. Ross) writes:

>>>

>>>Putting ground rods through or into concrete is a Bad Thing. I've heard >>>stories about concrete slabs (usually tower bases) that exploded when >>>lightning hit.

>>

>>This is an old wives' tale Andrew.

>You are wrong Gary. My brother bought a house that had a concrete pad >with a 4" pipe sticking up out of it. Originally it was installed to >mount the dish for a TVRO reciever, that the previous owner took with >him. He (my brother) decided that this 4" pipe was a perfect thing to >mount his CB vetical, so he dropped a another pipe into this one, (it >dropped in six feet) went up 30 feet and installed his vertical.

>About a month ago he incured a direct lightning hit to the vertical. >The concrete exploded! Great chunks of concrete flew over the top of >his roof and landed in the street. It cracked his swimming pool. >melted his pipe/tower in half. It cracked the foundation on his house >and on his neighbors house, and blew out his elctrical distribution >panel, damaged most of the electrical appliances in the house including >his dishwasher and garbage disposal, even though these were obviously >grounded. Looks to me that the path was through the tower to the concrete >base, through the ground and into the house wiring VIA its grounding! >(before someone flames me, the current actually flows from the earth >to the sky in a lightning strike, but we observe it as though it's the >other way 'round)

Strikes have been monitored with both polarities. However, every circuit must be complete. Analysis of current flows in this case would require much more detail information, current can flow to ground, through ground, from ground, through equipment grounds, and back to ground. But, details count, this can only happen if there are substantial resistance differences in various parts of "ground". These are often called "ground loops" and can be the very devil to deal with. And it's why I always recommend single point ground connections.

>As you have pointed out elsewhere, when concrete cures, there is alot

>of entraped water that doesn't enter the chemical reaction. This free >water is one of the very things that makes concrete a good conductor. >The trouble is, during a lightning strike the high heat turns the water >into steam, and the intense pressure caused by the entrapped steam >causes the concrete to burst violently. Same as when lightning strikes >a tree. It's not the electricity that cuts the tree in half, the tree >splits due to steam pressure.

>>Any conductor sufficient to conduct

>>the surge current when in air or soil is even better when embedded in >>concrete. Only in cases where there are *no* conductors embedded in >>the concrete can the resistance to the surge be high enough to cause >>heating that will "explode" the concrete.

>Wrong again. Think about it. 10,000-100,000,000 amps through a 1-5 ohm >resistor is going to have to dissipate one heck of alot of power. It does >this in the concrete base by making steam. Also, even a relatively small >conductor (small like a 1/2" rebar) will conduct all this current until >it melts in two, and by then the surrounding air is ionised enough to >sustain the discharge.

Yes, lets think about this. Lightning strikes have been recorded with current flows of 18,000 amperes. Rare "superbolts" have been observed that exceed this value by some unknown amount, but they are extremely rare. Now lightning can be viewed as a *constant current source* for analysis of effects on a ground system. A good Ufer ground will have less than 1 ohm resistance to ground. So, assuming a bolt current of 20,000 amperes and a ground resistance of 1 ohm for ease of calculation, the peak power dissipated by the Ufer ground is $P=I^2*R=2e4^2*1=400$ Megawatts. That seems like a lot, but that's peak pulse power, not deposited energy.

The duration of the typical lightning bolt is 200 microseconds. So to get deposited energy, that's what melts things and boils water, we multiply peak power by 2E-8 and divide by 3600 which gives 22.22 watt-hrs of energy, or 75 BTU in this case. That's less energy than the typical lightbulb consumes, and won't boil much water, it'll raise the temperature of one pound of water 75 degrees F. Certainly not enough to rupture 3000 PSI concrete or hurl large chunks over a house.

Obviously there's something wrong with this analysis. And that something is the 1 ohm to ground resistance of the mast "stuck" in a 6 foot pipe in concrete. Let's make it 10,000 ohms in the corroded mast to pipe junction, and another 2000 ohms in the short pipe in concrete interface, and another 500 ohms in the concrete to soil interface since it's area is relatively small. Now, with 12,500 ohms let's rework our analysis. Our 400 MW peak becomes 5,000,000 MW, and our deposited energy becomes 277.75 kW, or 947,683 BTU. Ouch! That can boil some water! As usual,

the devil is in the details. This isn't a Ufer ground, so we shouldn't expect it to perform like one.

>You could maybe disribute the load by parralleling a bunch of ground >connections, but if you observe lightning paths, you'll see that even >when several paths to ground exist the discharge will prefer ONE, seemingly >for no aparent reason, so you still loose.

Lightning is not some mysterious force, it has to follow Kirchhoff's Laws just like any other electric current. The current flowing from a node divides among the various branches in inverse proportion to the resistance of each branch. (Actually, I should be saying *impedance* rather than resistance throughout this note since a lightning pulse must be analyzed by AC methods. It can be modelled as a halfwave of a squarewave for simplicity, or more accurately as a damped sharp risetime pulse.)

>Gary, working in destructive testing you should know better. I'm not >saying that conductors placed in concrete are not good electrical >grounds, you're very correct on that point. Ufer grounds are excellent, >but remember they're intended to prevent relatively small discharges >from setting off bombs, not to dissipate a lightning strike. I've seen >this exploding concrete thing and I'm a believer!!

Marvin, Ufer grounds are Code accepted for lightning protection. They aren't just for static dissipation. However, the difference between a safe ground system and an attractive nuisance for lightning is in the details of the installation. One of the services I offer is ground system testing.

Let's go back and analyze an 8 foot ground rod installed in a 6 inch concrete floor. The Code says a "made" ground should present less than 25 ohms resistance to earth. That gives a deposited energy of 555 watt-hr for our lightning bolt. Of that, the concrete gets 1/16th (roughly), so it will see 118 BTU of heat. That will raise the temperature of the 15 pounds of hydrated concrete immediately adjacent to the rod by 7.86 degrees F. No explosion.

It should be obvious by now that since lightning can be considered a constant current source, things you do to reduce resistance to ground will reduce the amount of deposited energy in the paths to ground.

Gary

- -

Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary

```
1
Lawrenceville, GA 30244
______
Date: Wed, 23 Jun 1993 16:05:33 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!gatech!
willis1.cis.uab.edu!spam.dom.uab.edu!user@network.UCSD.EDU
Subject: Mac Morse Software
To: info-hams@ucsd.edu
In article <209p6e$q2e@nic.lth.se>, Lars Sundstroem <sund@tde.lth.se>
wrote:
> New version of MorseTrainer (1.0.2) for Macintosh computers
> Availability:
> via anonymous ftp:130.235.32.86
[feature list deleted
> And of course, it's FREEWARE!
> Lars Sundstroem, Department of Applied Electronics, Lunds University
> P.O. Box 118, 221 00 LUND, Sweden, phone: +46 46 10 95 13
> fax: +46 46 12 99 48, email: sund@tde.lth.se
> >>>
> Lars Sundstrom, Lund University, Dept.of Applied Electronics
> P.O. Box 118, S-221 00 LUND, SWEDEN. EMail: sund@tde.lth.se
> Phone: Int+ 46 46 10 95 13 Fax: Int+ 46 46 12 99 48
I downloaded via Fetch the file MorseTrainer-US-1.0.2.sit.hqx
can not get it to run. What type of file is it? The documentation file
found in the pub directory suggested it was a hypercard stack, so
I downloaded it as a binary file, set file type and creator as 'STAK'
and 'WILD' but hypercard said it was not a hypercard stack. Any
suggestions?
Steve
Date: 23 Jun 93 11:10:13
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!usc!
news.aero.org!gabriele@network.UCSD.EDU
Subject: Mac Morse Software
To: info-hams@ucsd.edu
```

I don't have the filetypes handy, but it's a regular Macintosh program

```
- not a hypercard stack. I recall that it's a binhexed, Stuffed file;
unstuff it and you should have your new copy of MorseTrainer.
73,
=Mark (KD6TIF)
gabriele@aero.org
_____
Date: Wed, 23 Jun 1993 12:35:43 GMT
From: gecko!lanzo@uunet.uu.net
Subject: UN: The ITU phonetic alpha
To: info-hams@ucsd.edu
[Argghhh ... temptation got the better of me ...
I should know better than to get sucked into things like this.]
  > Tom Bodoh writes:
  > TB> a
               AES0P
                                    n
                                            Ng
  > TB> b
               break
                                            OEDIPUS
                                    0
  > TB> c
               cease
                                             pseudo
                                    р
  > TB> d
                                    q
  > TB> e
               EYE
                                    r
  > TB> f
                                    s
                                            six
  > TB> g
                gnaw
                                    t
                                            TSAR
  > TB> h
               HONOUR
                                    u
                                            urn
  > TB> i
                ici
  > TB> i
                juan
                                    W
                                            wring
  > TB> k
                knowledge
                                            xylophone
                                    Х
  > TB> 1
                                    У
                                            you
  > TB> m
               mnemonic
                                            zero
                                    Z
  > --
Some other good ones:
   a aye, aerie
   С
        ceres
        fore (or is that four?)
   f
   g
        gnarly, gnomon
   j
        ja
   k
        knight
        one
   0
   р
       philtre, phony
       quipu ?
   q
   r
        roger
```

t

two won

x xenon

So what do we call it? The International Frenetic Alphabet ? :-)

+			+-	///	+
Mark Lanzo	KD4QLZ	lanzo@tekelec.com		\\\///	1
+			+-	\XX/ -	+

Date: 23 Jun 93 15:24:13 GMT

From: olivea!gossip.pyramid.com!pyramid!infmx!woof!randall@ames.arpa

Subject: USED HF RIG PRICE SURVEY

To: info-hams@ucsd.edu

USED HF/6m RIG PRICE SURVEY 23 June 1993 Version

I have absolutely no affiliation with any ham-radio-related business. Rigs are sorted by maker, model, and price. All transactions were made within the past three years. I welcome any additional responses; please indicate maker and model of your used rig, date bought/sold, how sold (Usenet, retailer, on air, private, etc.), price, condition, and any accessories or options.

Make Model	How Sold P:	rice(US\$)	Extras	Comment		
COBRA						
148	Hamfest Footh	1 \$70	None	CB convrtd to 10m		
COLLINS						
75S3B/32S1	Usenet	\$500	Spkr,PS	good condn		
DRAKE						
TR-3	Retailer	\$300	None	fair condn		
TR-5	Internet	\$300	CW flt,PS	good condn		
TR-4	Hamfest Footh	•	spkr,mic,PS	fair condn		
TR-4	Hamfest Footh	•	spkr,mic,PS	fair condn		
R-4C/T-4C	OnAir	\$200	PS, VFO	separate rcvr/xmtr		
TR-7	Usenet	\$600	3 flt, PS	Soparate Tevr/ Amer		
110 /	03CHC L	Ψ000	3 111, 13			

HEATHKIT

HW-8 HW-101 HW-101 HW-101 SB-101 SB-200 SB-300/400 SB-303	Hamfest Hamfest Evnsvl Private Private Usenet Usenet YelloSht Usenet Usenet Usenet	\$75 \$115 \$125 \$150 \$200 \$110 \$325 \$125 \$125 \$100	none PS CW flt,mic,PS,spkr CW flt,mic,PS,spkr CW flt,mnl,PS,spkr CW flt New tubes CW/AM flt,spkr,mnl CW/AM flt,spkr,mnl CW flt, manual	good condn needed some work,3/92 good condn good condn poor condn,4/92
HAMMERLUND				
HQ-145 HQ-145 HQ-170	Private Private Hamfest TRW	\$45 \$85 \$250	none none spkr	good condn good condn new condn
HENRY/TEMPO				
0ne 2020	Hamfest NC NutsVolts	\$140 \$75	none none	fair condn fair condn
ICOM				
IC-551 IC-720A IC-730 IC-735 IC-735 IC-735 IC-740 IC-745 IC-745 IC-751 IC-751 IC-751A IC-761 IC-765 IC-765 IC-765	Private Hamfest Lvrmr OnAir Usenet Usenet Private Hamfest NH Dayton Usenet Dayton Retailer Hamfest NC YlloSht Retailer Private Usenet QST Clasfd Retailer Usenet	\$350 \$400 \$400 \$600 \$700 \$800 \$575 \$650 \$650 \$750 \$750 \$150 \$150 \$1300 \$1600 \$1788 \$1800 \$2000	FM CW flt none None CW flt, keyer Keyer,spkr,PS PS,CW flt,FM CW flt PS,keyer,CW flt PS,keyer,CW flt CW flt PS,CW flt,keypd None PS,CW/SSB flt none 3 CW flt none none w/all options	6m rig, new condn near new condn fair condn good condn good condn 1 yr old, w/paddle good condn good condn good condn good condn mew condn w/speech modl 1 yr old good condn good condn new condn
IC-781 IC-781	OnAir QST Clasfd	\$3500 \$4000	none none	good condn new condn

JOHNSON

ValiantI VikRanger	Hamfest TRW Hamfest TRW	\$150 \$100	None None	fair condn fair condn		
8		Ψ=00				
KENWOOD						
TS-120S	OnAir	\$300	none	fair condn		
TS-120S	Usenet	\$350	PS	fair condn		
TS-140	Private	\$700	CW flt	new condn		
TS-180S	Usenet	\$450	FC,CW flt	fair condn		
TS-430S	Private	\$500	none	good condn		
TS-430	Private	\$600	FM bd	good condn		
TS440S/AT	OnAir	\$750	2 flt, ant tunr	new condn		
TS440S/AT	OnAir	\$850	2 flt, ant tunr	new condn		
TS-520	OnAir	\$300	None	good condn		
TS-520	Private	\$450	Heath amp,mic	good condn		
TS-520S	Private	\$300	Heath amp, mic	FC, good condn		
TS-520S	Usenet	\$375	CW flt,MFJ tuner	good condn		
TS-520SE	YlloSht	\$350	VFO,spkr			
TS-520SE	OnAir	\$500	VFO,spkr,CW flt,			
			mic			
TS-530S	Private	\$425	none	good condn		
TS-530S	Private	\$550	spkr,desk mic	good condn		
R-599A + T	Private	\$175	separate Rcvr/Xmtr	needed repair		
TS-690	OnAir	\$1800	CW flt,PS,stab,VM	new condn, w/6m		
TS-820	Hamfest NJ	\$400	none	fair condn		
TS-820S	Usenet	\$165	none	needed repair		
TS-820S	Usenet	\$575	CW flt,MFJ ant tr,	·		
		•	spare fina			
TS-830S	Hamfest LA	\$600	none	good condn		
TS-830S	Hamfest Cinci	n \$600	none	good condn		
TS-830S	Retailer	\$650	desk mic	good condn		
TS-850S/AT		\$1250	3 flt, ant tunr	new condn		
TS-940SAT	Usenet	\$1150	spkr,desk mic,	good condn		
			ant tunr,CW flt			
TS-940SAT	Retailer	\$1450	VM,spkr,ant tunr	good condn		
TS-950S	Retailer	\$2000	none	good condn		
TS-950S	Retailer	\$2000	all options	new condn		
			·			
RADIO SHACK						
HTX-100	Hamfest Footh	nl \$150	none	sale in 1991, 10m		
HTX-100	Retailer	\$159	none	RdoShk tent sale, 10m		
		•		,		
SWAN						
350	Retailer	\$175	PS,spkr,spr tubes	good condn		
		+- / •	. 3,00,001 20000	0		

TEMPO/HENRY

	0ne 2020	Hamfest NC NutsVolts	\$140 \$75	none none	fair condn fair condn		
TE	N-TEC						
	Century 21 Century 21 Corsair 1 Omni D Paragon Triton IV Triton IV Triton IV	Retailer Private Private YlloSht	\$150 \$165 \$595 \$400 \$1650 \$200 \$300 \$300	None None CW flt None PS,FM,CW flt None PS,CW flt, NL PS,CW flt, NL,mic	good condn new condn good condn good condn new condn No mic, good condn		
UN	UNIDEN						
	HR-2600	Usenet	\$160	None	Good condn, 10m		
YAESU							
	FT101B FT101E FT101EE FT-726R FT-726R FT747GX FT767GX FT767GX FT767GX	Private Usenet Retailer Usenet Retailer Retailer Usenet YelloSht OnAir	\$400 \$350 \$400 \$600 \$950 \$550 \$850 \$1375 \$2000	scope, PhP, spkr, FC none none 2m, 70cm, Sat 6m, 2m, 70cm CW flt 6m, 2m 6m, 2m, 70cm none	Good condn w/warranty,fair condn VHF rig 6m+VHF rig good w/warranty HF+VHF rig, good cond HF+VHF rig, good cond good condn		

ABBREVIATIONS

2m Two Meter band module included 6m Six Meter (50 MHz) band included 10m Ten Meter (28 MHz) band only

70cm 70 Centimeter (440 MHz) band included

Amp Linear amplifier

Bd Board

CW flt CW narrow filter FC Frequency Counter

Flt Filter FM unit

Foothl Foothill hamfest (California)

Lvrmr Livermore, California

mnl Manual

mic Desk mic

NC North Carolina NL Noise limiter

NutsVolts Nuts and Volts Periodical

OnAir Sold through on-the-air contact or packet

PhP Phone Patch
PS Power Supply
Sat Satellite unit

Stab Extra stable oscillator

TRW Swap Meet (Los Angeles CA)

VFO External VFO VM Voice Module

YlloSht Yellow Sheet Ham Trader Periodical

73 DE KK6MY/0

- -

Randall Rhea

Informix Software, Inc.

Project Manager, MIS Sales/Marketing Systems uunet!pyramid!infmx!randall

Date: Wed, 23 Jun 1993 15:25:30 GMT

From: usc!elroy.jpl.nasa.gov!swrinde!gatech!wa4mei!ke4zv!gary@network.UCSD.EDU

To: info-hams@ucsd.edu

References <C8zzyu.4zC@ucdavis.edu>, <1993Jun22.153924.27214@ke4zv.uucp>,

<C91Muo.KrC@ucdavis.edu>

Reply-To : gary@ke4zv.UUCP (Gary Coffman)

Subject : Re: Broadcast IDs

In article <C91Muo.KrC@ucdavis.edu> ez006683@othello.ucdavis.edu (Daniel D. Todd)
writes:

>If different companies can own stations with the same first 4 letters and >get a suffix appropriate for the different service can someone pay to have >the mutations on their call held by the FCC? Ie. If CBS didn't have a >KCBS-TV could they prevent somene else from getting it?

They could always sue. There's a comment period on almost all Commission actions, and they could file a claim that the use of the call would cause confusion among the audience. And if that failed, they could try the courts on trademark grounds. CBS successfully sued the Columbia Broadcasting School to prevent them from using that name since it caused the false conclusion in applicants' minds that the school was related to CBS in some way.

Gary

Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

Date: Wed, 23 Jun 1993 13:08:28 GMT

From: usc!howland.reston.ans.net!europa.eng.gtefsd.com!emory!kd4nc!ke4zv!

gary@network.UCSD.EDU
To: info-hams@ucsd.edu

References <930620130704_1@ccm.hf.intel.com>, <2056rbINNdgm@mojo.eng.umd.edu>,

<205rjo\$g5f@samba.oit.unc.edu>

Reply-To : gary@ke4zv.UUCP (Gary Coffman)

Subject: Re: Belden 9913 Coax

In article <205rjo\$g5f@samba.oit.unc.edu> Sherrod.Munday@launchpad.unc.edu
(Sherrod Munday) writes:

>

>I just got my Belden catalog in the mail, and I've got a question: For >some of the cables, they only list the capacitance of the cable per foot, >meter, or whatever. Now, in my EE courses here at Virginia Tech, we >dabbled in the capacitance's role in losses, so I know the less the >better, but I can't seem to recall a specific formula for loss at a >frequency for a given capacitance per length. Could someone post or mail >a formula if one exists?

This isn't as simple as it looks. You'd think that coax with 20-30 pf per foot would appear as a near direct short to RF, but it doesn't. The distributed capacitance *and* inductance of a properly terminated cable form a low pass filter of a type called a halfwave filter. Below cutoff, it's losses are low, essentially only the R losses as the currents circulate from L to C to L to C.... down the line.

Gary

- -

Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

Date: 23 Jun 93 17:00:26 GMT

From: news-mail-gateway@ucsd.edu

To: info-hams@ucsd.edu

References Faunt, N6TQS, 510-655-8604)p

Subject : STS-57 Update/President's Crew Conference

Interestingly enough, the Oakland (CA) Tribune had an article focusing on how dissapointed the kids at one local school were, because they got bumped, apparently, by the President's phone call. The article barely mentioned that the kids were going to use ham radio.

73, doug <faunt@netcom.com>

End of Info-Hams Digest V93 #770 ***********